

t35_seq_2 (TM-
cWCuaP1SNcPU12Vb7rwZNxQaNVGSGPoLA)

October 27, 2020

Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k2_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_comseq_2 : \iota \Rightarrow o$ be given. Let $v1_comseq_2 : \iota \Rightarrow o$ be given. Let $k3_comseq_2 : \iota \Rightarrow \iota$ be given. Let $k5_complex1 : \iota$ be given. Let $k2_seq_2 : \iota \Rightarrow \iota$ be given. Let $k55_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k17_complex1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Let $k18_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$k17_complex1\ k6_numbers = k6_numbers \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1\ X0) \wedge ((v1_funct_2\ X0\ k5_numbers\ k2_numbers) \wedge \\ & (m1_subset_1\ X0\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ k2_numbers)))))) \Rightarrow \\ & (\forall X1.((v1_funct_1\ X1) \wedge ((v1_funct_2\ X1\ k5_numbers\ k2_numbers) \wedge \\ & (m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ k2_numbers)))))) \Rightarrow \\ & (((v2_comseq_2\ X0) \wedge ((v1_comseq_2\ X1) \wedge (k3_comseq_2\ X0 = k5_complex1))) \Rightarrow \\ & (k3_comseq_2\ (k19_valued_1\ k5_numbers\ k2_numbers\ k2_numbers \\ & X0\ X1) = k5_complex1))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1\ X0) \wedge ((v1_funct_2\ X0\ k5_numbers\ k2_numbers) \wedge \\ & (m1_subset_1\ X0\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ k2_numbers)))))) \Rightarrow \\ & (\forall X1.((v1_funct_1\ X1) \wedge ((v1_funct_2\ X1\ k5_numbers\ k2_numbers) \wedge \\ & (m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ k2_numbers)))))) \Rightarrow \\ & (((v2_comseq_2\ X0) \wedge ((v1_comseq_2\ X1) \wedge (k3_comseq_2\ X0 = k5_complex1))) \Rightarrow \\ & (v2_comseq_2\ (k19_valued_1\ k5_numbers\ k2_numbers\ k2_numbers \\ & X0\ X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k2_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers)))))) \Rightarrow \\ & ((v2_comseq_2 X0) \Rightarrow (k2_seq_2 (k55_valued_1 k5_numbers k2_numbers \\ & X0) = k17_complex1 (k3_comseq_2 X0))) \end{aligned} \quad (4)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (5)$$

Assume the following.

$$k5_complex1 = k1_xboole_0 \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((v1_membered \\ & X1) \wedge ((v1_membered X2) \wedge (((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))) \wedge ((v1_funct_1 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X2))))))) \Rightarrow (k19_valued_1 X0 X1 X2 X3 X4 = k18_valued_1 \\ & X3 X4) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. (((\neg v1_xboole_0 \\ & X1) \wedge (v1_membered X1)) \wedge (((\neg v1_xboole_0 X2) \wedge (v1_membered X2)) \wedge \\ & (((v1_funct_1 X3) \wedge ((v1_funct_2 X3 X0 X1) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))) \wedge ((v1_funct_1 X4) \wedge ((v1_funct_2 X4 X0 X2) \wedge \\ & (m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 X0 X2)))))))))) \Rightarrow ((v1_funct_1 \\ & (k18_valued_1 X3 X4)) \wedge (v1_partfun1 (k18_valued_1 X3 X4) X0)) \end{aligned} \quad (8)$$

Assume the following.

$$\neg v1_xboole_0 k2_numbers \quad (9)$$

Assume the following.

$$v1_membered k2_numbers \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((v1_membered \\ & X1) \wedge ((v1_membered X2) \wedge (((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))) \wedge ((v1_funct_1 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X2))))))) \Rightarrow ((v1_funct_1 (k19_valued_1 X0 X1 X2 \\ & X3 X4)) \wedge (m1_subset_1 (k19_valued_1 X0 X1 X2 X3 X4) (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 k2_numbers)))) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))) \Rightarrow ((v1_partfun1 X2 X0) \Rightarrow (v1_funct_2 X2 X0 X1)) \end{aligned} \tag{12}$$

Theorem 1

$$\begin{aligned} & \forall X0. ((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k5_numbers k2_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers)))))) \Rightarrow \\ & (\forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers k2_numbers) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers k2_numbers)))))) \Rightarrow \\ & (((v2_comseq_2 X0) \wedge ((v1_comseq_2 X1) \wedge (k3_comseq_2 X0 = k5_complex1))) \Rightarrow \\ & (k2_seq_2 (k55_valued_1 k5_numbers k2_numbers (k19_valued_1 \\ & k5_numbers k2_numbers k2_numbers X0 X1)) = k6_numbers))) \end{aligned}$$